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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HINZE, LEO T

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/517,607

Applicant(s)

SCHASCHEK ET AL.

Examiner

Leo T. Hinze

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20041222</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2854

DETAILED ACTION

Claim Objections

1. Claims 46 and 47 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 46 and 47 depend from claims 44 and 45, respectively. Claims 44 and 45 require, in the alternative, an eccentric bearing, a lever arrangement, and a linear drive mechanism. As claims 44 and 45 do not require an eccentric bushing, claims 46 and 47 do not further limit the subject matter of the previous claims.

2. Appropriate correction and/or clarification is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 26-38 and 41-55 rejected under 35 U.S.C. 102(b) as being anticipated by Dawley, US 6,227,111 B1 (hereafter Dawley).

a. Regarding claim 26, Dawley teaches a printing group of a rotary printing press comprising: a forme cylinder (12, Fig. 1); a transfer cylinder (16, Fig. 1) in contact with said forme cylinder; a counter-pressure cylinder (18, Fig. 1) in contact with said transfer cylinder; support elements (20 Fig.

Art Unit: 2854

1a; col. 5, ll. 20-21) on said transfer cylinder and said counter-pressure cylinder and cooperating with each other to set a first contact pressure between said transfer cylinder and said counter-pressure cylinder; a shaft distance between said forme cylinder and said transfer cylinder; and means for adjusting said shaft distance to set a second contact pressure between said forme cylinder and said transfer cylinder (“movably mounted plate cylinder 12,” col. 4, ll. 26-27).

b. Regarding claim 29, Dawley teaches a printing group of a rotary printing press comprising: a forme cylinder (12, Fig. 1); a transfer cylinder (16, Fig. 1) in contact with said forme cylinder; a counter-pressure cylinder (18, Fig. 1) in contact with said transfer cylinder; a waterless printing forme (“printing plate,” col. 3, l. 41; Dawley does not teach using water or damping fluid so the printing plate is a waterless printing plate) on said forme cylinder; and means for adjusting a contact pressure between said forme cylinder and said transfer cylinder (“movably mounted plate cylinder 12,” col. 4, ll. 26-27; moving the plate cylinder will adjust the contact pressure between the plate cylinder and the blanket cylinder) as a function of a property of said waterless printing forme. The examiner interprets the adjustment of the pressure between the cylinders as a function of a property of said waterless printing forme to be a mental process or calculation, because the specification does not set forth in any detail how adjustment based on a property would work. Therefore, because this is a mental process or calculation, the apparatus taught by Dawley teaches adjusting a contact pressure between said forme cylinder and said transfer cylinder as a function of a property of said waterless printing forme, because the operator of the Dawley machine could take a property of said waterless printing forme into account when altering the distance between the plate cylinder and the transfer cylinder.

Art Unit: 2854

- c. Regarding claim 27, Dawley teaches all that is claimed as discussed in the rejection of claim 26 above. Dawley also teaches wherein a position of said forme cylinder with respect to said transfer cylinder can be set (“movably mounted plate cylinder 12,” col. 4, ll. 26-27; plate cylinder 12 can be moved and “set”).
- d. Regarding claims 28 and 36, Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 29 above. Dawley also teaches wherein said shaft distance is adjustable during operation of the rotary printing press (“movably mounted plate cylinder 12,” col. 4, ll. 26-27; plate cylinder 12 can be moved, and because moving the plate cylinder is an operation of the press, the plate cylinder is moved during operation of the rotary printing press).
- e. Regarding claim 30, Dawley teaches all that is claimed as discussed in the rejection of claim 29 above. Dawley also teaches wherein said property is a pressure stressing of said waterless printing forme. The examiner interprets the adjustment of the pressure between the cylinders as a function of a property of said waterless printing forme to be a mental process or calculation, because the specification does not set forth in any detail how adjustment based on a property would work. Therefore, because this is a mental process or calculation, the apparatus taught by Dawley teaches adjusting a contact pressure between said forme cylinder and said transfer cylinder as a function of a property of said waterless printing forme, because the operator of the Dawley machine could take a pressure stressing of said waterless printing forme into account when altering the distance between the plate cylinder and the transfer cylinder.
- f. Regarding claim 31, Dawley teaches all that is claimed as discussed in the rejection of claim 29 above. Dawley also teaches wherein said property is a temperature stressing of said waterless printing

Art Unit: 2854

forme. The examiner interprets the adjustment of the pressure between the cylinders as a function of a property of said waterless printing forme to be a mental process or calculation, because the specification does not set forth in any detail how adjustment based on a property would work. Therefore, because this is a mental process or calculation, the apparatus taught by Dawley teaches adjusting a contact pressure between said forme cylinder and said transfer cylinder as a function of a property of said waterless printing forme, because the operator of the Dawley machine could take a temperature stressing of said waterless printing forme into account when altering the distance between the plate cylinder and the transfer cylinder.

g. Regarding claim 32, Dawley teaches all that is claimed as discussed in the rejection of claim 29 above. Dawley also teaches wherein said property is a wear resistance of said waterless printing forme. The examiner interprets the adjustment of the pressure between the cylinders as a function of a property of said waterless printing forme to be a mental process or calculation, because the specification does not set forth in any detail how adjustment based on a property would work. Therefore, because this is a mental process or calculation, the apparatus taught by Dawley teaches adjusting a contact pressure between said forme cylinder and said transfer cylinder as a function of a property of said waterless printing forme, because the operator of the Dawley machine could take a wear resistance of said waterless printing forme into account when altering the distance between the plate cylinder and the transfer cylinder.

h. Regarding claim 33, Dawley teaches all that is claimed as discussed in the rejection of claim 29 above. Dawley also teaches a printing ink (printable ink must inherently be present in order for the apparatus of Dawley to fulfill its function of as a "printing unit," col. 1, ll. 6-7) usable to ink said

Art Unit: 2854

waterless printing forme and having a heat-related behavior (any ink will inherently have a heat-related behavior, as all physical materials are affected by heat) and wherein said contact pressure is adapted to said heat-related behavior. The examiner interprets the adjustment of the pressure between the cylinders as a function of a property of said waterless printing forme or ink to be a mental process or calculation, because the specification does not set forth in any detail how adjustment based on a property would work. Therefore, because this is a mental process or calculation, the apparatus taught by Dawley teaches adjusting a contact pressure between said forme cylinder and said transfer cylinder as a function of a heat-related behavior of a printing ink, because the operator of the Dawley machine could take a heat-related behavior of a printing ink into account when altering the distance between the plate cylinder and the transfer cylinder.

i. Regarding claim 34, Dawley teaches all that is claimed as discussed in the rejection of claim 33 above. Dawley also teaches wherein said heat-related behavior of said printing ink is one of its flowability and its adhesion to said waterless printing forme. The operator of the Dawley machine could take ink flowability and its adhesion to said waterless printing forme into account when altering the distance between the plate cylinder and the transfer cylinder.

j. Regarding claim 35, Dawley teaches all that is claimed as discussed in the rejection of claim 29 above. Dawley also teaches a shaft distance between said forme cylinder and said transfer cylinder and means for adjusting said shaft distance, said shaft distance varying said contact pressure ("movably mounted plate cylinder 12," col. 4, ll. 26-27; moving the plate cylinder will adjust the contact pressure between the plate cylinder and the blanket cylinder).

Art Unit: 2854

- k. Regarding claim 37, Dawley teaches all that is claimed as discussed in the rejection of claim 29 above. Dawley also teaches cooperating support elements on said transfer cylinder and said counter-pressure cylinder (20 Fig. 1a; col. 5, ll. 20-21).
- l. Regarding claim 38, Dawley teaches all that is claimed as discussed in the rejection of claim 29 above. Dawley also teaches wherein said shaft distance has different values to vary said second contact pressure (“movably mounted plate cylinder 12,” col. 4, ll. 26-27; moving the plate cylinder will adjust the contact pressure between the plate cylinder and the blanket cylinder).
- m. Regarding claim 41, Dawley teaches all that is claimed as discussed in the rejection of claim 26 above. Dawley also teaches at least one waterless printing forme (“printing plate,” col. 3, l. 41; Dawley does not teach using water or damping fluid so the printing plate is a waterless printing plate) on said forme cylinder.
- n. Regarding claims 42 and 43, Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 29 above. Dawley also teaches wherein said forme cylinder has a surface and wherein said waterless printing forme is securable to said forme cylinder surface (“printing plate,” col. 3, l. 41).
- o. Regarding claims 44 and 45, Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 29 above. Dawley also teaches wherein said means for adjusting said shaft distance includes a linear drive mechanism (64, Fig. 1).
- p. Regarding claims 46 and 47, Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 29 above. Claims 46 and 47 do not further limit claims 44 and 45.

Art Unit: 2854

- q. Regarding claims 48 and 49, Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 37 above. Dawley also teaches wherein said support elements roll off against each other (20 Fig. 1a; col. 5, ll. 20-21).
- r. Regarding claims 50 and 51, Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 29 above. Dawley also teaches a second forme cylinder (14, Fig. 1) and wherein said counter-pressure cylinder is a second transfer cylinder cooperating with said second forme cylinder (Fig. 1).
- s. Regarding claims 52 and 53, Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 29 above. Dawley also teaches a displacement path defining a path of movement of said transfer cylinder and said counter-pressure cylinder. Because the cylinders are movable, they inherently have a displacement "path."
- t. Regarding claims 54 and 55, Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 29 above. Dawley also teaches wherein said printing group is a component of a four cylinder printing group (see the four cylinders 12, 16, 18 and 14, Fig. 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2854

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawley in view of Lewis et al., US 5,487,338 (hereafter Lewis).

Regarding claim 39 and 40, Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 29 above.

Dawley does not teach a coating with silicon on said forme cylinder.

Lewis teaches a waterless printing plate with silicone (col. 2, ll. 41-42). Silicone is advantageous because it attracts ink (col. 2, ll. 42-43).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Dawley to include silicone on the forme cylinder, because Lewis teaches that silicone on waterless printing forms helps to attract ink.

8. Claims 56-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawley in view of Rau et al., US 5,784,957 (hereafter Rau).

a. Regarding claims 56 and 57:

Dawley teaches all that is claimed as discussed in the rejection of claims 26 and 29 above.

Art Unit: 2854

Dawley does not teach wherein said forme cylinder is temperature regulated.

Rau teaches a means for cooling transfer and form cylinders (col. 1, l. 65 – col. 2, l. 2). This prevents build-up of printing ink on the rubber blanket (col. 1, ll. 44-45).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Dawley to use Rau's cooling means, because Rau teaches this prevents build-up of printing ink on the rubber blanket.

b. Regarding claims 58 and 59, the combination of Dawley and Rau teaches all that is claimed in the rejection of claims 56 and 57 above. Rau, as combined with Dawley, also teaches at least one cooling conduit (53, Fig. 3) in said forme cylinder and means flowing a temperature regulating medium through said at least one cooling conduit ("coolant flows through feed tube," col. 4, ll. 2-5).

c. Regarding claims 60 and 61, the combination of Dawley and Rau teaches all that is claimed in the rejection of claims 58 and 59 above. Rau, as combined with Dawley, also teaches wherein said at least one cooling conduit is arranged close to a surface area of said forme cylinder (see location of chamber 53 near surface of cylinder, Fig. 3).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

Art Unit: 2854

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leo T. Hinze
Patent Examiner
AU 2854
14 November 2006


JUDY NGUYEN
SUPERVISORY PATENT EXAMINER